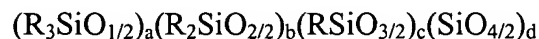


Amendments to the Claims

1. (Currently Amended) A curable silicone resin having the empirical formula



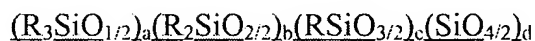
wherein each R is a hydrocarbon or substituted hydrocarbon group or a hydrogen atom;
and $a = 0.02$ to 0.8 ; $b = 0$ to 0.4 ; and $c+d = 0.2$ to 0.98 , where $a+b+c+d = 1.0$, and where
~~characterized in that~~ at least 2 mole% of the siloxane units in the resin are of the formula
 $R'_3SiO_{1/2}$, $RR'_2SiO_{1/2}$ or $R'_2SiO_{2/2}$, wherein each R' is an alkenyl group.

2. (Currently Amended) A curable silicone resin according to Claim 1, wherein~~characterized~~
~~in that~~ each R' is a vinyl group.
3. (Currently Amended) A curable silicone resin according to Claim 12, wherein
~~characterized in that~~ at least 10 mole% of the siloxane units of the resin are $Vi_3SiO_{1/2}$
groups, where Vi represents vinyl.
4. (Currently Amended) A curable silicone resin according to ~~any of Claims 1 to 3~~, wherein
~~characterized in that~~ at least 80 mole% of the siloxane units of the resin are selected from
 $R'_3SiO_{1/2}$, $RSiO_{3/2}$ and $SiO_{4/2}$ units.
5. (Currently Amended) A curable silicone resin according to ~~any of Claims 1 to 4~~, wherein
~~characterized in that~~ at least 20 mole% of the siloxane units of the resin are $ArSiO_{3/2}$ units
where Ar represents an aryl group.

6. (Currently Amended) A self-curable silicone resin according to ~~any of Claims 1 to 5,~~
wherein characterized in that 10-50 mole% of the siloxane units of the resin are $\text{HSiO}_{3/2}$ units.
7. (Currently Amended) A self-curable silicone resin according to ~~any of Claims 1 to 5,~~
wherein characterized in that 10-50 mole% of the siloxane units of the resin are $\text{HR}_2\text{SiO}_{1/2}$, $\text{H}_2\text{RSiO}_{1/2}$ or $\text{HRSiO}_{2/2}$ units.
8. (Currently Amended) A curable resin composition comprising (I) a curable silicone resin
having the empirical formula

$$(\text{R}_3\text{SiO}_{1/2})_a(\text{R}_2\text{SiO}_{2/2})_b(\text{RSiO}_{3/2})_c(\text{SiO}_{4/2})_d$$
wherein each R is a hydrocarbon or substituted hydrocarbon group or a hydrogen atom;
and a = 0.02 to 0.8; b = 0 to 0.4; and c+d = 0.2 to 0.98, where a+b+c+d=1.0, where at
least 2 mole% of the siloxane units in the resin are of the formula $\text{R}'_3\text{SiO}_{1/2}$, $\text{RR}'_2\text{SiO}_{1/2}$
or $\text{R}'_2\text{SiO}_{2/2}$, wherein each R' is an alkenyl group, according to any of Claims 1 to 5 and
 (II) a curing agent having at least one group reactive with the alkenyl group R'.
9. (Currently Amended) A curable resin composition according to Claim 8
wherein characterized in that the curing agent contains at least one Si-H group and the
composition includes a catalyst containing a platinum group metal.
10. (Currently Amended) A curable resin composition according to Claim 9
wherein characterized in that the curing agent is a polysiloxane containing at least two Si-
H groups or an aryl compound of the formula $\text{HX}_2\text{Si-Ar-SiX}_2\text{H}$, in which Ar is a
substantially nonflexible linkage including at least one para-arylene moiety and each X
is a hydrocarbon or substituted hydrocarbon group or a hydrogen atom.
11. (Currently Amended) A curable resin composition comprising a self-curable resin
according to Claim 6 ~~or Claim 7~~ and a catalyst containing a platinum group metal.

12. (Currently Amended) A process for the preparation of a cured heat resistant silicone resin having a low coefficient of thermal expansion, comprising the step of reacting ~~characterised in that~~ a curable silicone resin having the empirical formula



wherein each R is a hydrocarbon or substituted hydrocarbon group or a hydrogen atom;
and a = 0.02 to 0.8; b = 0 to 0.4; and c+d = 0.2 to 0.98, where a+b+c+d = 1.0, where at
least 2 mole% of the siloxane units in the resin are of the formula R'₃SiO_{1/2},

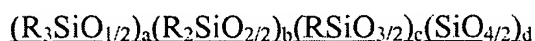
RR'₂SiO_{1/2} or R'₂SiO_{2/2}, wherein each R' is an alkenyl group,

~~according to any of Claims 1 to 5 is reacted with a curing agent having at least one~~
functional group reactive with the alkenyl group R'.

13. (Currently Amended) A process according to Claim 12, ~~wherein~~characterised in that the curing agent contains at least one Si-H group and the curing process is carried out in the presence of a catalyst containing a platinum group metal.

14. (Currently Amended) A process for the preparation of a cured heat resistant silicone resin having a low coefficient of thermal expansion, comprising the step of heating ~~characterised in that~~ a self-curable silicone resin according to Claim 6 ~~or Claim 7 is~~ heated in the presence of a catalyst containing a platinum group metal.

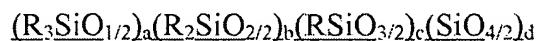
15. (Currently Amended) A process for encapsulating a substrate comprising the steps of coating, ~~characterised in the substrate is encapsulated with~~ in a curable silicone resin composition comprising (I) a curable silicone resin having the empirical formula



wherein each R is a hydrocarbon or substituted hydrocarbon group or a hydrogen atom;
and a = 0.02 to 0.8; b = 0 to 0.4; and c+d = 0.2 to 0.98, where a+b+c+d = 1.0, where at
least 2 mole% of the siloxane units in the resin are of the formula R'₃SiO_{1/2}, RR'₂SiO_{1/2}
or R'₂SiO_{2/2}, wherein each R' is an alkenyl group, and (II) a curing agent having at least

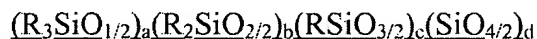
one group reactive with the alkenyl group R', according to any of Claims 8 to 11 and then reacting (I) and (II).the resin is cured by a process according to any of Claims 12 to 14.

16. (Currently Amended) A process for coating a substrate comprising the steps of-
characterised in that the curable silicone resin according to any of Claims 8 to 11 is
applyingied a curable silicone composition comprising (I) a curable silicone resin having
the empirical formula



wherein each R is a hydrocarbon or substituted hydrocarbon group or a hydrogen atom;
and a = 0.02 to 0.8; b = 0 to 0.4; and c+d = 0.2 to 0.98, where a+b+c+d =1.0, where at
least 2 mole% of the siloxane units in the resin are of the formula R'_3SiO_{1/2}, RR'2SiO_{1/2}
or R'_2SiO_{2/2}, wherein each R' is an alkenyl group, and (II) a curing agent having at least
one group reactive with the alkenyl group R' as a thin film to a substrate and then
reacting (I) and (II)before being cured by a process according to any of Claims 12 to 14.

17. (Currently amended) A process for making a composite material, comprising the step of
impregnating characterised in that at least one layer of fibrous material is impregnated
with a curable silicone composition comprising (I) a curable silicone resin having the
empirical formula



wherein each R is a hydrocarbon or substituted hydrocarbon group or a hydrogen atom;
and a = 0.02 to 0.8; b = 0 to 0.4; and c+d = 0.2 to 0.98, where a+b+c+d =1.0, where at
least 2 mole% of the siloxane units in the resin are of the formula R'_3SiO_{1/2}, RR'2SiO_{1/2}
or R'_2SiO_{2/2}, wherein each R' is an alkenyl group, and (II) a curing agent having at least
one group reactive with the alkenyl group R' and then reacting (I) and (II)a curable-
silicone resin composition according to any of Claims 8 to 11 and the resin is cured by a
process according to any of Claims 12 to 14.

18. (Currently amended) A process according to ~~any of Claims 12 to 17~~, wherein the first step
is characterised in that the curing process comprises a first step at a temperature in the range
50 to 300°C and further comprising a a-subsequent heat cure step at a ~~higher~~ temperature in
the range 300 to 500°C
19. (Currently amended) A process according to Claim 18, wherein ~~characterized in that the~~
further heating step at 300-500°C is carried out in the presence of an amine which is in the
vapour state at the temperature of the further heating step.
20. (Currently amended) A process according to Claim 19, wherein ~~characterized in that the~~
amine is a tertiary amine of the formula NZ_3 , where each Z represents an alkyl group having
1 to 4 carbon atoms.
21. (Currently amended) A cured heat resistant silicone resin composition prepared by the
process of ~~any of Claims 12 to 20~~.
22. (New) A cured heat resistant silicone resin composition prepared by the process of Claim 18.